- SAFAPS SIM ARCHITECTURE DOCUMENT

Jeremy Harrault

SWORDFISH

– SAFAPS SIM –	Publication date	26/01/2016	– SPARCS –
Stress and Fatigue			5. 7 · 55
Audit and Prediction	Project name	SAFAPS SIM	Software Product Architecture Resources Control System
Service Simulator	Subject	Architecture Document	Resources Control System
	Chapter name	Objectives of this document	

Objectives of this document

The purpose of this document is to present the architecture of the SAFAPS SIM project. It will contain diagrams as well as explanations to describe the architectural choices in order to fulfil the requirements. The information contained in the document act as a guide in order to fully develop, deploy and setup SAFAPS. Reflexions and reviewed decisions are tracked in this document.

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– SPARCS –Software Product ArchitectureResources Control System

Glossary and Terminology

-A-

API: Application Programming Interface

-S-

S&F: Stress and Fatigue

SAFAPS: Stress and Fatigue Audit and Prediction Service

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Document Description

Title	SAFAPS SIM : Architecture Document		
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Product Owner	Augustin Tataru	taau15md@student.ju.se	
Authors	Jeremy Harrault	hajr15bp@ju.se	
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Revisions table

Date	Rev.	Author	Modified Section(s)	Comments
25/01/16	0.1	Jeremy Harrault	All	Add empty sections
28/01/16	0.2	Jeremy Harrault	5.	Add context and database view
29/01/16	0.3	Jeremy Harrault	5.	Add invoice table in database view and add
				additional information

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	Chapter name	Introduction and Management	
		Summary	

1. Introduction and Management Summary

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	Chapter name	General Architecture Principles	

2. General Architecture Principles

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	Chapter name	Architectural Design Decisions	

3. Architectural Design Decisions

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4. Viewpoints

- 4.1. The context viewpoint
- 4.2. The functional viewpoint
- 4.3. The information viewpoint
- 4.4. The concurrency viewpoint
- 4.5. The development viewpoint
- 4.6. The deployment viewpoint
- 4.7. The operational viewpoint

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5. Views

5.1. Context view

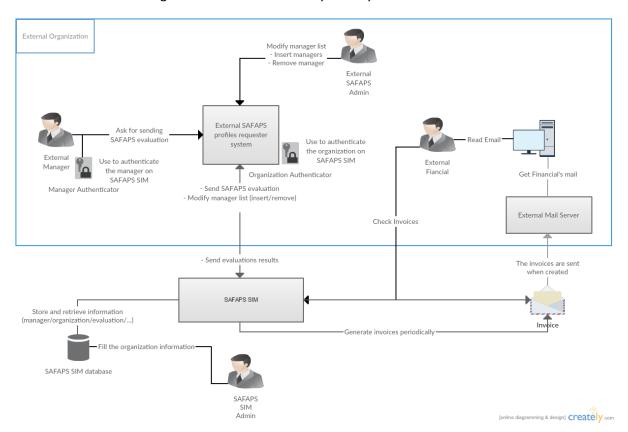
SAFAPS SIM is a system that is mainly used by external systems from organizations. Managers from such organizations can send SAFAPS through their external system to SAFAPS SIM and get authenticated using unique authenticating keys. Managers cannot interrogate SAFAPS SIM directly.

Once the evaluation result is ready, it is sent back to the external system.

When managers are added or removed from the external system, it can notify SAFAPS SIM so that they are added or removed in SAFAPS SIM too.

External organizations' financials can consult invoices for the organization in two ways. He can either consult them from his mail or directly from SAFAPS SIM website. Indeed, when an invoice is generated by SAFAPS SIM, it is automatically sent to the external organization.

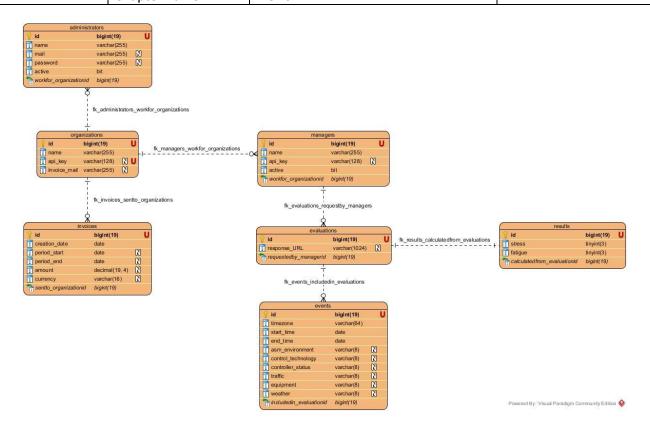
SAPAFS SIM is a simulation software. To limit the work to do on the back-end of SAFAPS website, the information about the organizations is filled in the system by the SAFAPS administrators.



5.2. Database view

This diagram has been made without considering the database type which is used in the project. It offers a generic model showing how the data are stored and related to each other.

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Some additional information regarding this diagram needs to be given in order to fully understand how to manipulated this presented data:

Table	Column	Additional information	
administrators	active	The active field represent whether the account is still authorized	
managers		to use SAFAPS SIM functionalities. The type of this field	
		represent a data with only 2 exclusive possible values.	
		Depending on the database implementation, these values can	
		either be TRUE/FALSE or 1/0. Both are correct.	
invoices	currency	The currency of the invoice is stored as locale as describe in the	
		RFC 4646 (e.g. en_US, en_UK).	
events	timezone	The time zone of the event is stored as a string in the format	
		"Continent/City".	

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6. Quality Property Summary

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	Chapter name	Important Scenarios	

7. Important Scenarios

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8. Issues Awaiting Resolution

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9. Appendices